



1

SEQUENCE LISTING

<110> YOUNG, ANDREW A.
KOLTERMAN, ORVILLE G.

<120> USE OF EXENDINS AND AGONISTS THEREOF FOR MODULATION OF
TRIGLYCERIDE LEVELS AND TREATMENT OF DYSLIPIDEMIA

<130> 249/124

<140> 09/756,690
<141> 2001-01-09

<150> 60/175,365
<151> 2000-01-10

<160> 188

<170> PatentIn Ver 2.1

<210> 1
<211> 39
<212> PRT
<213> Heloderma horridum

<220>
<223> Exendin-3

<220>
<223> c-term amidation

<400> 1
His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30
Ser Gly Ala Pro Pro Pro Ser
35

<210> 2
<211> 39
<212> PRT
<213> Heloderma suspectum

<220>
<223> Exendin-4

<220>
<223> c-term amidation

<400> 2
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

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Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 3

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (1)

<223> His, Arg or Tyr

<220>

<221> MOD_RES

<222> (2)

<223> Ser, Gly, Ala or Thr

<220>

<221> MOD_RES

<222> (3)

<223> Asp or Glu

<220>

<221> MOD_RES

<222> (6)

<223> Phe, Tyr or naphthylalanine

<220>

<221> MOD_RES

<222> (7)

<223> Thr or Ser

<220>

<221> MOD_RES

<222> (8)

<223> Ser or Thr

<220>

<221> MOD_RES

<222> (9)

<223> Asp or Glu

<220>

<221> MOD_RES

<222> (10)

<223> Leu, Ile, Val, pentylglycine or Met

<220>

<221> MOD_RES

<222> (14)

<223> Leu, Ile, pentylglycine, Val or Met

<220>

<221> MOD_RES

<222> (22)

<223> Phe, Tyr or naphthylalanine

<220>

<221> MOD_RES

<222> (23)

<223> Ile, Val, Leu, pentylglycine, tert-butylglycine or Met

<220>

<221> MOD_RES

<222> (24)

<223> Glu or Asp

<220>

<221> MOD_RES

<222> (25)

<223> Trp, Phe, Tyr, or naphthylalanine

<220>

<221> MOD_RES

<222> (31)

<223> Pro, homoproline, 3Hyp, 4Hyp, thioproline,
N-alkylglycine, N-alkylpentylglycine, or N-alkylalanine

<220>

<221> MOD_RES

<222> (36)

<223> Pro, homoproline, 3Hyp, 4Hyp, thioproline,
N-alkylglycine, N-alkylpentylglycine, or N-alkylalanine

<220>

<221> MOD_RES

<222> (37)

<223> Pro, homoproline, 3Hyp, 4Hyp, thioproline,
N-alkylglycine, N-alkylpentylglycine, or N-alkylalanine

<220>

<221> MOD_RES

<222> (38)

<223> Pro, homoproline, 3Hyp, 4Hyp, thioproline,
N-alkylglycine, N-alkylpentylglycine, or N-alkylalanine

<220>

<221> MOD_RES

<222> (39)

<223> Ser, Thr or Tyr, which is optionally amidated with the
provision that the compound is not exendin-3 or exendin-4

<400> 3

Xaa	Xaa	Xaa	Gly	Thr	Xaa	Xaa	Xaa	Xaa	Ser	Lys	Gln	Xaa	Glu	Glu
1				5				10					15	

Glu	Ala	Val	Arg	Leu	Xaa	Xaa	Xaa	Xaa	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25						30	

Ser Gly Ala Xaa Xaa Xaa Xaa
35

<210> 4
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
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<222> (1)
<223> His, Arg or Tyr

<220>
<221> MOD_RES
<222> (2)
<223> Ser, Gly, Ala or Thr

<220>
<221> MOD_RES
<222> (3)
<223> Asp or Glu

<220>
<221> MOD_RES
<222> (5)
<223> Ala or Thr

<220>
<221> MOD_RES
<222> (6)
<223> Ala, Phe, Tyr or naphthylalanine

<220>
<221> MOD_RES
<222> (7)
<223> Thr or Ser

<220>
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<222> (8)
<223> Ala, Ser or Thr

<220>
<221> MOD_RES
<222> (9)
<223> Asp or Glu

<220>
<221> MOD_RES
<222> (10)
<223> Ala, Leu, Ile, Val, pentylglycine or Met

<220>
<221> MOD_RES
<222> (11)
<223> Ala or Ser

<220>
<221> MOD_RES
<222> (12)
<223> Ala or Lys

<220>
<221> MOD_RES
<222> (13)
<223> Ala or Gln

<220>
<221> MOD_RES
<222> (14)
<223> Ala, Leu, Ile, pentylglycine, Val or Met

<220>
<221> MOD_RES
<222> (15)
<223> Ala or Glu

<220>
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<223> Ala or Glu

<220>
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<222> (17)
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<220>
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<222> (19)
<223> Ala or Val

<220>
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<222> (20)
<223> Ala or Arg

<220>
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<222> (21)
<223> Ala or Leu

<220>
<221> MOD_RES
<222> (22)
<223> Ala, Phe, Tyr or naphthylalanine

<220>
<221> MOD_RES

<222> (23)
 <223> Ile, Val, Leu, pentylglycine, tert-butylglycine or Met

 <220>
 <221> MOD_RES
 <222> (24)
 <223> Ala, Glu or Asp

 <220>
 <221> MOD_RES
 <222> (25)
 <223> Ala, Trp, Phe, Tyr or naphthylalanine

 <220>
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 <222> (26)
 <223> Ala or Leu

 <220>
 <221> MOD_RES
 <222> (27)
 <223> Ala or Lys

 <220>
 <221> MOD_RES
 <222> (28)
 <223> Ala or Asn

 <220>
 <221> MOD_RES
 <222> (31)
 <223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine
 N-alkylpentylglycine or N-alkylalanine

 <220>
 <221> MOD_RES
 <222> (36)..(38)
 <223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine
 N-alkylpentylglycine or N-alkylalanine

 <220>
 <223> provided that no more than three of Xaa3, Xaa5, Xaa6,
 Xaa8, Xaa10, Xaa11, Xaa12, Xaa13, Xaa14, Xaa15, Xaa16,
 Xaa17, Xaa19, Xaa20, Xaa21, Xaa24, Xaa25, Xaa26, Xaa27
 and Xaa28 are Ala

 <220>
 <223> this peptide may encompass 28-38 residues, wherein
 residues 1-28 are constant and residues 29-38 may vary
 in length according to the specification

 <220>
 <223> c-term may be amidated

 <400> 4
 Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 5

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (1)

<223> His, Arg, Tyr, Ala, Norval, Val or Norleu

<220>

<221> MOD_RES

<222> (2)

<223> Ser, Gly, Ala or Thr

<220>

<221> MOD_RES

<222> (3)

<223> Ala, Asp or Glu

<220>

<221> MOD_RES

<222> (4)

<223> Ala, Norval, Val, Norleu or Gly

<220>

<221> MOD_RES

<222> (5)

<223> Ala or Thr

<220>

<221> MOD_RES

<222> (6)

<223> Phe, Tyr or naphthylalanine

<220>

<221> MOD_RES

<222> (7)

<223> Thr or Ser

<220>

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<222> (8)

<223> Ala, Ser or Thr

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<222> (9)
<223> Ala, Norval, Val, Norleu, Asp or Glu

<220>
<221> MOD_RES
<222> (10)
<223> Ala, Leu, Ile, Val, pentylglycine or Met

<220>
<221> MOD_RES
<222> (11)
<223> Ala or Ser

<220>
<221> MOD_RES
<222> (12)
<223> Ala or Lys

<220>
<221> MOD_RES
<222> (13)
<223> Ala or Gln

<220>
<221> MOD_RES
<222> (14)
<223> Ala, Leu, Ile, pentylglycine, Val or Met

<220>
<221> MOD_RES
<222> (15)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (16)
<223> Ala or Glu

<220>
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<222> (17)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (19)
<223> Ala or Val

<220>
<221> MOD_RES
<222> (20)
<223> Ala or Arg

<220>
<221> MOD_RES
<222> (21)
<223> Ala or Leu

<220>
 <221> MOD_RES
 <222> (22)
 <223> Phe, Tyr or naphthylalanine

<220>
 <221> MOD_RES
 <222> (23)
 <223> Ile, Val, Leu, pentylglycine, tert-butylglycine or Met

<220>
 <221> MOD_RES
 <222> (24)
 <223> Ala, Glu or Asp

<220>
 <221> MOD_RES
 <222> (25)
 <223> Ala, Trp, Phe, Tyr or naphthylalanine

<220>
 <221> MOD_RES
 <222> (26)
 <223> Ala or Leu

<220>
 <221> MOD_RES
 <222> (27)
 <223> Ala or Lys

<220>
 <221> MOD_RES
 <222> (28)
 <223> Ala or Asn

<220>
 <221> MOD_RES
 <222> (31)
 <223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine
 N-alkylpentylglycine or N-alkylalanine

<220>
 <221> MOD_RES
 <222> (36)..(38)
 <223> Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine
 N-alkylpentylglycine or N-alkylalanine

<220>
 <223> provided that no more than three of Xaa3, Xaa5, Xaa6, Xaa8,
 Xaa10, Xaa11, Xaa12, Xaa13, Xaa14, Xaa15, Xaa16, Xaa17,
 Xaa19, Xaa20, Xaa21, Xaa24, Xaa25, Xaa26, Xaa27 and Xaa28
 are Ala

<220>
 <223> provided also that, if Xaa1 is His, Arg or Tyr, then at
 least one of Xaa3, Xaa4 and Xaa9 is Ala

<220>

<223> this peptide may encompass 28-39 residues, wherein residues 1-28 are constant and residues 29-39 may vary in length according to the specification

<220>

<223> c-term may be amidated

<400> 5

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 6

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<400> 6

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
20 25 30

<210> 7

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 7

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
20 25 30

<210> 8

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 8

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Ala	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 9

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 9

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25						30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 10

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 10

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25						30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 11
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 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 11
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser Ser
 20 25 30
 Gly Ala Pro Pro Pro Ser
 35

<210> 12
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 12
 Tyr Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 13
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 13
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Tyr
 35

<210> 14

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 14

His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 15

<211> 42

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (6)

<223> naphthylalanine

<220>

<223> c-term amidation

<400> 15

His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Asp Leu Ser Lys Gln
 1 5 10 15

Met Glu Glu Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
 20 25 30

Gly Pro Ser Ser Gly Ala Pro Pro Pro Ser
 35 40

<210> 16
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 16
 His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 17
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 17
 His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 18
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 18
 His Gly Glu Gly Thr Phe Thr Thr Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 19

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 19

His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 20

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (10)

<223> pGly

<220>

<223> c-term amidation

<400> 20

His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 21
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (10)
 <223> pGly

<220>
 <223> c-term amidation

<400> 21
 His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 22
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (14)
 <223> pGly

<220>
 <223> c-term amidation

<400> 22
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro Pro Ser
 35

<210> 23
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (14)

<223> pGly

<220>

<223> c-term amidation

<400> 23

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 24

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (22)

<223> naphthylalanine

<220>

<223> c-term amidation

<400> 24

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 25

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 25

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 26

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 26

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 27

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (23)

<223> tBuG

<220>

<223> c-term amidation

<400> 27

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 28
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<221> MOD_RES
<222> (23)
<223> tBuG

<220>
<223> c-term amidation

<400> 28
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 29
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 29
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 30
<211> 39
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 30

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 31

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (31)

<223> tPro

<220>

<221> MOD_RES

<222> (36)

<223> tPro

<220>

<221> MOD_RES

<222> (37)

<223> tPro

<220>

<221> MOD_RES

<222> (38)

<223> tPro

<220>

<223> c-term amidation

<400> 31

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa	Xaa	Xaa	Ser
			35			

<210> 32
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<220>
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 <223> tPro

<220>
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<400> 32
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa Ser
 35

<210> 33
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<220>
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<400> 33
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
 35

<210> 34
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<220>
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<400> 34
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

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<220>
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<400> 35
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 36
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<220>
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 <222> (38)
 <223> tPro

<220>
 <223> c-term amidation

<400> 36
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa Ser
 35

<210> 37
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 <223> MeAla

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<223> c-term amidation

<400> 37

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

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<221> MOD_RES

<222> (38)

<223> MeAla

<220>

<223> c-term amidation

<400> 38

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 39

<211> 39

<212> PRT

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 <223> MeAla

<220>
 <223> c-term amidation

<400> 39
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa Ser
 35

<210> 40
 <211> 28
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 <213> Artificial Sequence

<220>
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<220>
 <223> c-term amidation

<400> 40
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 41
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>

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<220>

<222> c-term amidation

<400> 41

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 42

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

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<400> 42

His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 43

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 43

His	Gly	Glu	Gly	Ala	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 44

<211> 28

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

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<400> 44

His	Gly	Glu	Gly	Thr	Ala	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 45

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

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<223> c-term amidation

<400> 45

His	Gly	Glu	Gly	Thr	Phe	Thr	Ala	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 46

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 46

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 47

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 47

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ala	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 48

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 48

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Ala	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 49

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 49

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Ala	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 50

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 50

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Ala	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 51

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 51

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 52

<211> 28

<212> PRT

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 52

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Ala
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 53

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 53

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Ala	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 54

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 54

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Ala	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 55

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 55

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Ala	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 56

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 56

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Ala	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 57

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 57

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Ala	Phe	Leu	Lys	Asn
			20				25				

<210> 58

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 58

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Ala	Leu	Lys	Asn
			20				25				

<210> 59

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 59

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Ala	Lys	Asn
			20					25			

<210> 60

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 60

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Ala	Asn
			20					25			

<210> 61

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 61

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Ala
			20					25			

<210> 62

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 62

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10				15			

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			

Ser	Gly	Ala	Pro	Pro	Pro
			35		

<210> 63

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 63

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10				15			

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			

Ser	Gly	Ala	Pro	Pro	Pro
			35		

<210> 64

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 64

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10				15			

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			

Ser Gly Ala Pro Pro
35

<210> 65
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 65
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro
35

<210> 66
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 66
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro
35

<210> 67
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 67

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro
 35

<210> 68

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 68

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala
 35

<210> 69

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 69

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala
 35

<210> 70

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 70

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser Gly

<210> 71

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 71

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser Gly

<210> 72

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 72

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser

<210> 73
 <211> 33
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 73
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser

<210> 74
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 74
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

<210> 75
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 75
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

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<210> 76
<211> 31
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 76
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
20 25 30

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<210> 77
<211> 31
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

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<400> 77
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
  1                   5             10             15
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Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro
20 25 30

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<210> 78
<211> 30
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 78
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly
 20 25 30

<210> 79
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 79
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
 20 25

<210> 80
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 80
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly
 20 25

<210> 81
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
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 <222> (31)
 <223> tPro

<220>
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<222> (36)
 <223> tPro

<220>
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 <222> (37)
 <223> tPro

<220>
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 <222> (38)
 <223> tPro

<220>
 <223> c-term amidation

<400> 81
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa
 35

<210> 82
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
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 <222> (36)
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<220>
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 <222> (37)
 <223> tPro

<220>
 <221> MOD_RES
 <222> (38)
 <223> tPro

<220>
 <223> c-term amidation

<400> 82
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Xaa Xaa Xaa
 35

<210> 83
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (31)
 <223> NMeala

<220>
 <223> c-term amidation

<400> 83
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30

Ser Gly Ala Pro Pro
 35

<210> 84
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
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 <222> (31)
 <223> NMeala

<220>
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 <223> NMeala

<220>
 <221> MOD_RES
 <222> (37)
 <223> NMeala

<220>
 <223> c-term amidation

<400> 84
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa
 35

<210> 85
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
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 <222> (31)
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<220>
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 <222> (36)
 <223> hPro

<220>
 <221> MOD_RES
 <222> (37)
 <223> hPro

<220>
 <223> c-term amidation

<400> 85
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa
 35

<210> 86
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
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<220>
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 <222> (31)
 <223> hPro

<220>
 <221> MOD_RES
 <222> (36)
 <223> hPro

<220>
 <223> c-term amidation

<400> 86
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa
 35

<210> 87
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 87
 Arg Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala
 35

<210> 88
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 88

His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
 20 25 30

<210> 89

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (6)

<223> naphthylalanine

<220>

<223> c-term amidation

<400> 89

His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 90

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 90

His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 91

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 91

His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 92

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 92

His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Ala Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 93

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (10)

<223> pentylgly

<220>

<223> c-term amidation

<400> 93

His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 94

<211> 28

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
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 <223> naphthylalanine

<220>
 <223> c-term amidation

<400> 94
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
 20 25

<210> 95
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (23)
 <223> tButylgly

<220>
 <223> c-term amidation

<400> 95
 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn
 20 25

<210> 96
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 96

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
 20 25

<210> 97

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 97

His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser

<210> 98

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 98

His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
 20 25

<210> 99

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (31)
 <223> hPro

<220>
 <221> MOD_RES
 <222> (36)
 <223> hPro

<220>
 <221> MOD_RES
 <222> (37)
 <223> hPro

<220>
 <223> c-term amidation

<400> 99
 His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa
 35

<210> 100
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 100
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 101
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 101

His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 102

<211> 28

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Description of Artificial Sequence: Exendin Agonist

 $\langle 220 \rangle$

<223> c-term amidation

<400> 102

His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

 $\langle 210 \rangle$ 103

<211> 28

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Description of Artificial Sequence: Exendin Agonist

 $\langle 220 \rangle$

<223> c-term amidation

<400> 103

His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 104

<211> 28

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Description of Artificial Sequence: Exendin Agonist

 $\langle 220 \rangle$

<223> c-term amidation

<400> 104

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 105

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 105

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 106

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 106

His	Gly	Glu	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 107

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 107

His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 108

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 108

His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 109

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 109

Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 110

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 110

Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 111

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 111

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 112

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 112

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 113

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 113

Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 114

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 114

Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 115

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (6)

<223> naphthylalanine

<220>

<223> c-term amidation

<400> 115

Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 116

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (6)
 <223> naphthylalanine

<220>
 <223> c-term amidation

<400> 116
 Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 117
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 117
 Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 118
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 118
 Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 119
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 119

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ala	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 120

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 120

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ala	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 121

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 121

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 122

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 122

Ala Gly Asp Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 123

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 123

Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 124

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 124

Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 125

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 125

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 126

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 126

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 127

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (10)

<223> pentylgly

<220>

<223> c-term amidation

<400> 127

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Xaa	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 128
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (10)
 <223> pentylgly

<220>
 <223> c-term amidation

<400> 128
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 129
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 129
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 130
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 130
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

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<210> 131
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 131
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

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<210> 132
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

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<220>
<223> c-term amidation
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<400> 132
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

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<210> 133
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

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<220>
<223> c-term amidation
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<400> 133
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

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<210> 134
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 134
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

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<210> 135
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 135
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

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<210> 136
<211> 28
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Exendin Agonist

<220>
<223> c-term amidation

<400> 136
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 137
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (14)
 <223> pentylgly

<220>
 <223> c-term amidation

<400> 137
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
 20 25

<210> 138
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (14)
 <223> pentylgly

<220>
 <223> c-term amidation

<400> 138
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 139
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 139

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
		20					25				

<210> 140

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 140

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
		20					25				

<210> 141

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 141

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Ala
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
		20					25				

<210> 142

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 142

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Ala
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 143

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 143

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		

Ala	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 144

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 144

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5				10					15		

Ala	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 145

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 145

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Ala Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 146

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 146

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 147

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 147

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Ala Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 148

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 148

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 149

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 149

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Ala Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 150

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 150

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 151

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (22)

<223> naphthylalanine

<220>

<223> c-term amidation

<400> 151

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn
20 25

<210> 152

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<221> MOD_RES

<222> (22)

<223> naphthylalanine

<220>

<223> c-term amidation

<400> 152

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
20 25

<210> 153

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 153

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn
 20 25

<210> 154
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 154
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn
 20 25

<210> 155
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (23)
 <223> tButylgly

<220>
 <223> c-term amidation

<400> 155
 Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn
 20 25

<210> 156
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES

<222> (23)

<223> tButylgly

<220>

<223> c-term amidation

<400> 156

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn
20 25

<210> 157

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 157

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn
20 25

<210> 158

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 158

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
20 25

<210> 159

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 159

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Ala	Leu	Lys	Asn
			20					25			

<210> 160

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 160

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Ala	Leu	Lys	Asn
			20					25			

<210> 161

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 161

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Ala	Lys	Asn
			20					25			

<210> 162

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 162

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Ala	Lys	Asn
			20					25			

<210> 163

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 163

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Ala	Asn
			20					25			

<210> 164

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 164

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10				15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Ala	Asn
			20					25			

<210> 165

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 165

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Ala
 20 25

<210> 166

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 166

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Ala
 20 25

<210> 167

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 167

Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Glu
 20 25

Ser Gly Ala Pro Pro Pro
 35

<210> 168

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 168

His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro
35

<210> 169

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 169

His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro
35

<210> 170

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 170

His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro
 35

<210> 171
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 171
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro
 35

<210> 172
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 172
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala
 35

<210> 173
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 173

His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala
 35

<210> 174

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 174

His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly

<210> 175

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 175

His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser

<210> 176
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 176
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

<210> 177
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 177
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30

<210> 178
 <211> 31
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 178
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
 20 25 30

<210> 179
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 179
 His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly
 20 25 30

<210> 180
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <223> c-term amidation

<400> 180
 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly
 20 25

<210> 181
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (31)
 <223> tPro

<220>
 <221> MOD_RES
 <222> (36)
 <223> tPro

<220>
 <221> MOD_RES

<222> (37)
 <223> tPro

<220>
 <221> MOD_RES
 <222> (38)
 <223> tPro

<220>
 <223> c-term amidation

<400> 181
 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa
 35

<210> 182
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (36)
 <223> tPro

<220>
 <221> MOD_RES
 <222> (37)
 <223> tPro

<220>
 <221> MOD_RES
 <222> (38)
 <223> tPro

<220>
 <223> c-term amidation

<400> 182
 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Xaa Xaa Xaa
 35

<210> 183
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (31)
 <223> NMeala

<220>
 <221> MOD_RES
 <222> (36)
 <223> NMeala

<220>
 <221> MOD_RES
 <222> (37)
 <223> NMeala

<220>
 <223> c-term amidation

<400> 183
 His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
 20 25 30
 Ser Gly Ala Xaa Xaa
 35

<210> 184
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Exendin Agonist

<220>
 <221> MOD_RES
 <222> (31)
 <223> hPro

<220>
 <221> MOD_RES
 <222> (36)
 <223> hPro

<400> 184

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa
		35	

<210> 185

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 185

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala
		35

<210> 186

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 186

His	Gly	Asp	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly
			20					25					30

<210> 187

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 187

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 188

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Exendin Agonist

<220>

<223> c-term amidation

<400> 188

Ala	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			